

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - NSPS SOURCE

PERMITTEE

Gold Eagle  
Attn: Mike Profetto  
4400 South Kildare  
Chicago, Illinois 60632-4372

<u>Application No.:</u> 02040082	<u>I. D. No.:</u> 031600GLY
<u>Applicant's Designation:</u>	<u>Date Received:</u> April 24, 2002
<u>Subject:</u> Lubricating Oils and Grease Manufacturing Plant	
<u>Date Issued:</u> July 21, 2003	<u>Expiration Date:</u> July 21, 2008
<u>Location:</u> 4400 South Kildare, Chicago, 60632	

Permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of thirty-nine storage tanks, seventeen product blending/day storage tanks, eight container filling lines, and two boilers pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of Volatile Organic Material (VOM) and Hazardous Air Pollutants (HAPs) from the source to less than major source thresholds (i.e., 25 tons/year for VOM, 10 tons/year for a single HAP and 25 tons/year for totaled HAP). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits for this location.
- 2a. The twenty-three storage tanks with capacity more than 10,000 gallons are subject to New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels, 40 CFR 60, Subparts A and Kb. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.
- b. The Permittee shall fulfill the monitoring of operations requirements of the New Source Performance Standards, 40 CFR 60.116b(a) and (b) for these tanks. That is, records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessels, shall be maintained and readily accessible for the life of the source.

- c. At all times the Permittee shall also maintain and operate the storage tanks, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions, pursuant to the NSPS, 40 CFR 60.11(d).
- 3a. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device (35 Ill. Adm. Code 218.122(b)).
- b. If no odor nuisance exists the limitations of Conditions 3(a) shall only apply to the loading of volatile organic liquids with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F) (35 Ill. Adm. Code 218.122(c)).
- 4. Total VOM emissions from the source operations shall not exceed 2.2 tons/month and 17.7 tons/year as specified below:
  - a. Storage and blending tanks operations:

VOM-containing materials throughput: 200,000 gallons/month,  
1,650,000 gallons/year;

VOM emissions: 0.2 tons/month, 1.6 tons/year

VOM emissions from the storage and blending tanks operations shall be calculated using equations given by AP-42 (5th edition, Section 7.1) and utilized in the USEPA distributed computer programs TANKS.
  - b. Eight container filling lines:

VOM-containing materials throughput: 1,750,000 gallons/month,  
14,000,000 gallons/year;

VOM emissions: 0.6 tons/month, 4.7 tons/year

VOM emissions from the container filling lines shall be calculated using equations given by AP-42 (5th edition, Section 5.2).
  - c. Fugitive VOM emissions from the facility operations shall not exceed 1.4 ton/mo and 11.4 ton/yr. It shall be calculated using USEPA SOCMF factors (EPA-453/R-95-017).

These limits define the potential emissions of the VOM and are based on the actual emissions determined from the maximum production capacity. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.

5. This permit is issued based upon VOM-containing materials are not used for equipment clean-up operations.
- 6a. The emissions of HAPs as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish by rule which would require the Permittee to obtain a Clean Air Act Permit Program permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a Clean Air Act Permit Program permit from the Illinois EPA.
- b. The HAP emissions shall be calculated using procedures specified for VOM calculations for respective operations.
7. Operation and emissions of the two boilers (combined) shall not exceed the following limits:

Natural Gas Usage: 15 mmscf/month, 125 mmscf/year

<u>Pollutant</u>	<u>Emission Factor</u> <u>(Lb/mmscf)</u>	<u>Emissions</u>	
		<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Nitrogen Oxides (NO <sub>x</sub> )	100	0.8	6.2
Carbon Monoxide (CO)	84	0.6	5.2
Particulate Matter (PM)	7.6	0.06	0.5
Volatile Organic Materials (VOM)	5.5	0.04	0.3

These limits are based on the maximum boilers operations and standard emission factors given by AP-42. Compliance with annual limits shall be determined on a monthly basis from a running total of 12 months of data.

8. This permit is issued based on negligible emissions of particulate matter from the blending operations. For this purpose emission shall not exceed nominal emission rate of 0.1 lb/hour and 0.44 tons/year.
9. The Permittee shall maintain monthly records of the following items:
  - a. For each storage or blending tank and container filling lines:
    - i. Names and identification number of materials transferred and/or stored;
    - ii. Material throughput (gal/mo, gal/yr);
    - iii. VOM and HAP content (wt.%);
  - b. VOM and total HAP emission calculations (tons/month, tons/year);
  - c. Separate emission calculations for each individual HAP with emission rate exceeding 0.5 tons/month;

- d. Natural gas usage (mmscf/month, mmscf/year).
10. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA and USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to Illinois EPA request for records during the course of a source inspection.
11. The Permittee shall submit the following additional information from the prior calendar year, along with the Annual Emissions Report, due May 1st of each year: names and identification number of materials transferred and their throughput (gallons/year).
12. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, IL 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control - Regional Office  
9511 West Harrison  
Des Plaines, Illinois 60016

If you have any questions on this permit, please call Valeriy Brodsky at 217/782-2113.

Donald E. Sutton, P.E.  
Manager of Permit Section  
Division of Air Pollution Control

DES:VJB:psj

cc: Illinois EPA, FOS Region 1  
Illinois EPA, Compliance Section  
Lotus Notes

## Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from the lubricating oils and grease manufacturing plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. This is a throughput of 14,000,000 gallons of liquid organic chemicals per year. The resulting maximum emissions are well below the levels, e.g., 25 tons/year for VOM, 10 tons per year for a single HAP, and 25 tons per year for totaled HAP, at which this source would be considered a major source for purposes Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

1. Total VOM emissions from the source operations shall not exceed 2.2 tons/month and 17.7 tons/year as specified below:

- a. Storage and blending tanks operations:

VOM-containing materials throughput: 200,000 gallons/month,  
1,650,000 gallons/year;

VOM emissions: 0.2 tons/month, 1.6 tons/year

VOM emissions from the storage and blending tanks operations shall be calculated using equations given by AP-42 (5th edition, Section 7.1) and utilized in the USEPA distributed computer programs TANKS.

- b. Eight container filling lines:

VOM-containing materials throughput: 1,750,000 gallons/month,  
14,000,000 gallons/year;

VOM emissions: 0.6 tons/month, 4.7 tons/year

VOM emissions from the container filling lines shall be calculated using equations given by AP-42 (5th edition, Section 5.2).

- c. Fugitive VOM emissions from the facility operations shall not exceed 1.4 ton/mo and 11.4 ton/yr. It shall be calculated using USEPA SOCMF factors (EPA-453/R-95-017).

- 2a. The emissions of HAPs as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish by rule which would require the Permittee to obtain a Clean Air Act Permit Program permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a Clean Air Act Permit Program permit from the Illinois EPA.

- b. The HAP emissions shall be calculated using procedures specified for VOM calculations for respective operations.
3. Operation and emissions of the two boilers (combined) shall not exceed the following limits:

Natural Gas Usage: 15 mmscf/month, 130 mmscf/year

<u>Pollutant</u>	<u>Emission Factor</u> <u>(Lb/mmscf)</u>	<u>Emissions</u>	
		<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Nitrogen Oxides (NO <sub>x</sub> )	100	0.8	6.2
Carbon Monoxide (CO)	84	0.6	5.2
Particulate Matter (PM)	7.6	0.06	0.5
Volatile Organic Materials (VOM)	5.5	0.04	0.3

4. This permit is issued based on negligible emissions of particulate matter from the blending operations. For this purpose emission shall not exceed nominal emission rate of 0.1 lb/hour and 0.44 tons/year.

DES:VJB:psj